

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-26 (Canceled).

Claim 27 (Currently Amended): An information medium configured to have data recorded thereon by a recording apparatus and data reproduced therefrom by a reproducing apparatus, said data including management information used to access a stream object for at least one of recording and reproducing the data by at least one of the recording apparatus and the reproducing apparatus and bitstream information, said information medium comprising:

~~the stream object, formed from the bitstream information, including a plurality of MPEG transport packets, at least one first data unit having transport packets, and at least one second data unit having the at least one first data unit, the at least one second data unit including a plurality of pairs of the transport packets and time information relating to the paired transport packets~~ a data area configured to record the bitstream information, and a management area configured to record the management information, wherein

a first data unit defines a data packet of transport packets or application packets,

a second data unit defines a data unit of stream blocks or stream object units,

a third data unit defines an object data of said stream object,

said bitstream information to be recorded in the data area is configured by at least one said third data unit including at least one said second data unit including at least one said first data unit

said second data unit includes header information,

said header information includes time-related information of the first data unit,

the header information including said time-related information is configured to be recorded in the data area which is different from the management area, and

the management information is used to access the bitstream information to reproduce at least one data unit with said reproducing apparatus.

Claims 28-36 (Canceled).

Claim 37 (Currently Amended): A method of recording bitstream information on an information medium having a data area and a management area, said information medium comprising ~~a stream object, formed from the bitstream information, including a plurality of MPEG transport packets, at least one first data unit having the transport packets, and at least one second data unit having the at least one first data unit, the at least one second data unit including a plurality of pairs of the transport packets and time information relating to the paired transport packets~~ a data area configured to record the bitstream information, and a management area configured to record the management information, wherein

a first data unit defines a data packet of transport packets or application packets,

a second data unit defines a data unit of stream blocks or stream object units,

a third data unit defines an object data of said stream object,

said bitstream information to be recorded in the data area is configured by at least one said third data unit including at least one said second data unit including at least one said first data unit,

said second data unit includes header information,

said header information includes time-related information of the first data unit, and

the header information including said time-related information is configured to be recorded in the data area which is different from the management area, said recording method comprising:

recording the bitstream information of the data area; and
recording management information of the bitstream information on the management area.

Claim 38 (Currently Amended): A method of reproducing bitstream information from an information medium having a data area and a management area, said information medium comprising ~~a stream object, formed from the bitstream information, including a plurality of MPEG transport packets, at least one first data unit having the transport packets, and at least one second data unit having the at least one first data unit the at least one second data unit including a plurality of pairs of the transport packets and time information relating to the paired transport packets~~ a data area configured to record the bitstream information, and a management area configured to record the management information, wherein

a first data unit defines a data packet of transport packets or application packets,

a second data unit defines a data unit of stream blocks or stream object units,

a third data unit defines an object data of said stream object,

said bitstream information to be recorded in the data area is configured by at least one said third data unit including at least one said second data unit including at least one said first data unit,

said second data unit includes header information,

said header information includes time-related information of the first data unit, and

the header information including said time-related information is configured to be recorded in the data area which is different from the management area,

said reproducing method comprising:

reproducing management information of the bitstream information from the management area; and

reproducing the bitstream information from the data area.

Claim 39 (Currently Amended): An information medium configured to have data recorded thereon and data reproduced therefrom, said data including management information used to access a stream object for at least one of recording and reproducing the data by at least one of the recording apparatus and the reproducing apparatus and bitstream information, said information medium comprising:

~~the stream object, formed from the bitstream information, including a plurality of MPEG transport packets, at least one first data unit having the transport packets, and at least one second data unit having the at least one first data unit, wherein said management information includes information relating to a number of the transport packets~~

a data area configured to record the bitstream information, and a management area configured to record the management information, wherein

a first data unit defines a data packet of transport packets or application packets,

a second data unit defines a data unit of stream blocks or stream object units,

a third data unit defines an object data of said stream object,

said bitstream information to be recorded in the data area is configured by at least one said third data unit including at least one said second data unit including at least one said first data unit,

said second data unit includes header information,

said header information includes time-related information of the first data unit,

the header information including said time-related information is configured to be recorded in the data area which is different from the management area, and

the management information is used to access the bitstream information to reproduce at least one data unit with said reproducing apparatus.

Claim 40 (Previously Presented): A method of recording bitstream information on an information medium having a data area and a management area, said information medium comprising ~~a stream object, formed from the bitstream information, including a plurality of MPEG transport packets, at least one first data unit having the transport packets, and at least one second data unit having the at least one first data unit, wherein said management information includes information relating to a number of the transport packets~~ a data area configured to record the bitstream information, and a management area configured to record the management information, wherein

a first data unit defines a data packet of transport packets or application packets,

a second data unit defines a data unit of stream blocks or stream object units,

a third data unit defines an object data of said stream object,

said bitstream information to be recorded in the data area is configured by at least one said third data unit including at least one said second data unit including at least one said first data unit,

said second data unit includes header information,

said header information includes time-related information of the first data unit, and

the header information including said time-related information is configured to be recorded in the data area which is different from the management area, said recording method comprising:

recording the bitstream information on the data area; and

recording management information of the bitstream information on the management area.

Claim 41 (Previously Presented): A method of reproducing bitstream information from an information medium having a data area and a management area, said information medium comprising ~~a stream object, formed from the bitstream information, including a plurality of MPEG transport packets, at least one first data unit having the transport packets, and at least one second data unit having the at least one first data unit, wherein said management information includes information relating to a number of the transport packets a~~ data area configured to record the bitstream information, and a management area configured to record the management information, wherein

a first data unit defines a data packet of transport packets or application packets,

a second data unit defines a data unit of stream blocks or stream object units,

a third data unit defines an object data of said stream object,

said bitstream information to be recorded in the data area is configured by at least one said third data unit including at least one said second data unit including at least one said first data unit,

said second data unit includes header information,

said header information includes time-related information of the first data unit, and

the header information including said time-related information is configured to be recorded in the data area which is different from the management area, said reproducing method comprising:

reproducing management information of the bitstream information from the management area; and

reproducing the bitstream information from the data area.

Claims 42-43 (Canceled).